

## Gunnison Project- Historical Log

Hole Name :J-02

Date: 08 February 11

Segment Start Depth :0.00

Segment End Depth :178.03

End of hole Depth :1195.00

[illegible]

Scale 1" = 30'

Hole Name :J-02

Date: 08 February 11

Segment Start Depth :178.03

Segment End Depth :356.06

End of hole Depth :1195.00

Depth	CoreLoss%	IF	V1	V2	PF	v	SG	AltCode	FmCode	LockCode	Description	TCU_adj	ASCU_adj	MO
200	25													
225	25													
250														
275								nd	Qal	Qal	Alluvium and Gila conglomerate			
300														
325														
350														

Hole Name :J-02

Date: 08 February 11

Segment Start Depth :356.06

Segment End Depth :534.08

End of hole Depth :1195.00

Depth	CoreLoss%	IF	V1	V2	PF	v	SG	ltnCode	fmCode	lockCod	Description	TCU_adj	ASCU_adj	MO
375	25													
400	25													
425	25													
450	25							nd	Qal	Qal	Alluvium and Gila conglomerate			
475	25													
500	25													
525	25													

Hole Name :J-02

Date: 08 February 11

Segment Start Depth :534.08

Segment End Depth :712.11

End of hole Depth :1195.00

Depth	CoreLoss%	IF	V1	V2	PF	v	SG	AltCode	FmCode	RockCode	Description	TCU_adj	ASCU_adj	MO
550								nd	Qal	Qal	Alluvium and Gila conglomerate			
								Tg	IPn	H	Slightly limey , very fine grained, very hard, dull greenish to dull brownish green altered shale. Alteration consists of garnetization, but also some idocrase and quartz veining . The last two feet rather pinkish to green colored and has calcite in fractures. some local Mn dendrites. Bedding from 30 at top(565) to 55 (580)at the bottom.			
575		BED	30	35	BED			Teqd	IPn	M	White, medium grained, marble. Dark brown alteration bands every two to four feet averaging about one inch in thickness. They consist of brown talc, calcite, garnet, idocrase and traces of green and blue CuO. There is a 1.5 foot band at 575 containing no Cu. where these brown alteration zones are soft, they consist primarily of talc.			
600		BED	35	60	BED			nd	IPn	Tda	Gray with light gray to white mottling and streaking or banding (probably represents bedding). Very hard, tactite. Some local cherty zones. Calcite , green and blue oxide. Some garnet and idocrase in many of the fractures of this zone. Soft clay with blue Cu oxide in fractures from 582 to 583. some local Mn dendrites ( 610-619). slightly shaley from 615-619. Bedding? 55-60.			
625								IPn	M		Slightly finer than above. Fewer and narrower dark brown alteration patches which usually carry a trace of CuO. A three inch clay zone at 623.5. The alteration ribbons are invariable along a fracture or healed fracture which is usually represented by a calcite veinlet in the middle of the ribbon.			
								Tg	IPn	H	Altered shale. Very fine grained, light gray, hard to very hard. Patchy garnet throughout. 634.5-636 Dark brown alteration.			
650								IPn	M		white, fine to medium coarse, some relatively minor 1/2 inch dark brown alteration ribbons. Some with a trace of CuO. 663-668 Fine grained soft to hard with much darker brown alteration-garnet, idocrase?, brown calcite and talc. Rare trace of CuO.			
675		BED	35					nd	IPn	H	Hard, altered shale, very hard , very fine grained , light gray to creamy gray, garnet with minor idocrase? Scattered throughout. Dark brown alteration patches and ribbons , some very narrow quartz ribbons a rare trace of CuO. Bedding at 55 degrees.			
								IPn	M		Fine grained , medium soft to soft, light gray marble. Local minor brown alteration ribbons (1/2 inch)			
								IPn	H		Hard, very fine grained. Altered shale. very fine grained, light gray,. Parallel light and dark altered patches( garnet, tremolite calcite and wollastonite) and streaks parallel to bedding?) throughout.			
700								IPn	M		Medium to coarse grained, white marble. Local relatively minor brown alteration patches and ribbons. Also local light gray altered hard shale zones up to four feet. The shale zones contain brown alteration patches and ribbons, are hard, silicated and may contain a very minor traces of CuO. Altered shale zones are from 702.5-704.5, 725-729, 730-732, 749-751, 758-759 and 766-770. This zone appears to have been broken and healed from 768 to 770. 772-774 altered shale , 770-794 marble, has local wollastonite patches throughout.			

Scale 1" = 30'

Hole Name :J-02

Date: 08 February 11

Segment Start Depth :712.11

Segment End Depth :890.14

End of hole Depth :1195.00

Depth	CoreLoss%	IF	V1	V2	PF	v	SG	AltCode	FmCode	LockCode	Description	TCU_adj	ASCU_adj	MO
725	25													
750									IPn	M	Medium to coarse grained, white marble. Local relatively minor brown alteration patches and ribbons. Also local light gray altered hard shale zones up to four feet. The shale zones contain brown alteration patches and ribbons, are hard, silicated and may contain a very minor traces of CuO. Altered shale zones are from 702.5-704.5, 725-729, 730-732, 749-751, 758-759 and 766-770. This zone appears to have been broken and healed from 768 to 770. 772-774 altered shale , 770-794 marble, has local wollastonite patches throughout.			
775														
800					BED			nd	IPn	H	Altered limey shale. Hard, very fine grained gray. Frequently has a streaked and mottled effect. Core is very hard silicified and silicated ( very fine grained , garnet tremolite?, wollastonite, idocrase?). Not unlike the previous shale zones.			
825														
850									IPn	M	Fine to medium grained, white and light gray marble. Marble seems more highly altered with wollastonite and tremolite?, local brown (talc) ribbons and patches. Usually with traces of CuO. 823and 824 traces of green and blue Cu O. 825-834 marble pinkish and hematite stained, broken and healed. 835-836 shale softer and less altered than above zones. 850-862 Marble highly altered with many hard and soft dark brown altered patches and zones ( talc), also tactite zones( garnet, diopside? wollastonite?, tremolite?). A trace of Cu O can usually be found in the dark brown zones.816-812 coarse crystalline marble. 825-827 Chert.			
875														

Hole Name :J-02

Date: 08 February 11

Segment Start Depth :890.14

Segment End Depth :1068.17

End of hole Depth :1195.00

Depth	CoreLoss%	IF	V1	V2	PF	v	SG	AltCode	EmCode	LockCod	Description	TCU_adj	ASCU_adj	MO
900	25													
925											Fine to medium grained, white and light gray marble. Marble seems more highly altered with wollastonite and tremolite?, local brown (talc) ribbons and patches. Usually with traces of CuO. 823and 824 traces of green and blue Cu O. 825-834 marble pinkish and hematite stained, broken and healed. 835-836 shale softer and less altered than above zones. 850-862 Marble highly altered with many hard and soft dark brown altered patches and zones ( talc), also tactite zones( garnet, diopside? wollastonite?, tremolite?). A trace of Cu O can usually be found in the dark brown zones.816-812 coarse crystalline marble. 825-827 Chert.			
950											Many brown alteration patches and zones. Some containing rhodochrosite and traces of CuO, some light creamy soft clay zones. Some zones of tactite? With dendritic Mn.			
975											Fine-grained , light gray to white. Slightly hard.			
											Light , gray , hard , fine to medium grained with black dendritic Mn, some minor specks of Cu O.			
											Altered marble. White, medium grained marble with wollastonite and tremolite.			
1000														
1025											Mineralized tactite. Fine-grained ,hard white and Tannish gray, very weakly limey. Weekly mineralized with disseminated Cu. The copper occurs as specks of chalcocite associated with green Cu O. some disseminated chalcopyrite noted in fractures, also associated with chalcocite and green Cu O noted , altered hematite, casts of chalcopyrite. Some local dendritic Mn. 1001-1019 tactite very weakly mineralization practically nil. 1037-1046 Soft, limey ,very fine grained , dark brown (talc) and pink zones, this may represent an altered shale. Cu mineralization practically nil.			
1050											Altered shale, very fine-grained ,limey, brown and gray altered zones, hard to medium soft. Similar to altered shale zones above. Most of the brown patches and zones contain a trace of Cu O. Calcite as fractures fillings.			

Scale 1" = 30'

Hole Name :J-02

Date: 08 February 11

Segment Start Depth :1068.17

Segment End Depth :1246.19

End of hole Depth :1195.00

Depth	CoreLoss%	IF	V1	V2	PF	v	SG	AltCode	EmCode	LockCode	Description	TCU_adj	ASCU_adj	MO
1075	25										Altered shale, very fine-grained ,limey, brown and gray altered zones, hard to medium soft. Similar to altered shale zones above. Most of the brown patches and zones contain a trace of Cu O. Calcite as fractures fillings.			
1100											Weakly mineralized tactite. Fine grained white and Tannish gray. Hard, very weakly mineralization tactite. Mineralization as specks of chalcocite usually with a green Cu O halo.			
1125											Altered limey shale. Very fine grained , brown and light gray medium soft to soft. Locally mottled in appearance, altered limey shale. Some minor Cu O staining in fractures.			
1125											Slightly pinkish, white, soft, fine grained weakly altered marble.			
1150											Altered oxidized marble? 1125-1139 Broken and healed brecciated limey zone. Much pink brecciated limey. Much pink, brown and red iron-staining , mostly light brown limonite in fractures. Much if the brown material in vugs lined with calcite. 1139-1160 Core is white and gray fine grained , relatively soft light brown limonite many fractures ( but not nearly as extensive as above), altered marble. some healed fractures filled with calcite, some calcite lined vugs. 1160-1164 zone appears to be white marble fragments surrounded by dark brown alteration material in the interstices. this entire zone has only weakly local CuO staining and no sulfides.			
1175											Marble highly altered with patchy calc silicates(tremolite?) and wollastonite) giving core a brecciated to conglomerated appearance. Core practically barren. 1183-1188 core weakly disseminated with chalcocite specks.			
1200											Fine to medium grained , weakly altered vuggy marble. Vugs lined with calcite.			
1225											EOH			